

**Spatial Information Technology Center**  
**at**  
**Fulton-Montgomery Community College**

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**Final Technical Report**

October 2002 – September 2003

Sponsoring Agency: National Aeronautics & Space Administration  
John C. Stennis Space Center

Grant Number(s): NAG 13-00043 and NAG 13-02053

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## **Grant Management Overview**

The Spatial Information Technology Center (SITC) at Fulton-Montgomery Community College (FMCC) continued to fulfill its mission and charter by successfully completing its third year of operations under Congressional funding and NASA sponsorship. Third year operations (01 Oct 02 – 30 Sep 03) have been funded and conducted utilizing two authorized Research Grants NAG 13-00043 (via a one-year no-cost extension expiring Sep 03) and NAG 13-02053 (one-year no-cost extension expiring Sep 04).

Drawdowns and reporting of fiscal activities for SITC operations continues to pass through the Institute for the Application of Geo-spatial Technology (IAGT) at Cayuga Community College in Auburn, New York. Fiscal activity of the Center is reported quarterly via SF 272 to IAGT, thus this report contains only a budgetary overview and forecast of future expenditures for the remaining funds of NAG 13 – 02053. Funds from NAG 13 – 00043 were exhausted during the fourth quarter of fiscal year FY02 - 03, which necessitated initial draw down of NAG 13 – 02053. The IAGT receives no compensation for administrative costs as authorized and approved by NASA in each award budget. This report also includes the necessary addendums for each NAG award, as required by federal guidelines, though no reportable activities took place within this report period. Attached are the signed Report of New Technology/Inventions and a Final Property Report identifying qualifying equipment purchased by the Center.

As an academic, economic and workforce development oriented program, the Center has made significant strides in bringing the technology, knowledge and applications of the spatial information technology field to the region it serves. Through the mission of the Center, the region's educational, economic development and work force communities have become increasingly educated to the benefits of spatial (Geospatial) technology, particularly in the region's K-12 arena. SITC continues to positively affect the region's education, employment and economic development, while expanding its services and operations designed to be customer driven, growing infrastructure and affecting systemic change.

## **Center Overview**

### **Outreach**

During this reporting period, the Spatial Information Technology Center directly dealt with some 2889 individual students, educators, businesses and government representatives in addition to an estimated population of exceeding 400,000 via broadcast and print media (see NASA Education Programs, Stennis Space Center, FMCC/STIC Staff Report Form – Summary Report). Of this population, more than 30% were K-12 teachers and higher education faculty, 32% students and 37% were individuals or from non-academic organizations.

## Personnel

The Center began third year operations on October 1, 2002 with 100% of authorized full-time staff positions occupied. Funded positions included the Director, Education Operations Coordinator, Technical Operations Coordinator and Program Secretary.

Professional staffing of the Center increased by 25% in January 2003 when the FMCC Board of Trustees approved the position of External Operations Manager (EOM). The EOM position was designed as an administrative, *per diem*, contract with an average workweek of three days. The primary responsibilities of the EOM were designed to foster off-campus entrepreneurial opportunities, pursue grant-funded opportunities and oversee the technical operations of the Center. In June 2003, the FMCC Board of Trustees voted to allow the EOM position to become a full-time grant-funded administrative position effective Sep 2003. Accordingly, the responsibilities of the new OM (Operations Manager) have been expanded to include oversight for all daily operations of the Center in addition to off-campus operations.

## Facilities and Equipment

Capabilities of the Center continued to grow through this reporting period in every respect. This fiscal year saw the acquisition of new hardware and software driven by the recommendation of the EOM. Additionally, the College provided new office space for the EOM. The grant provided the required IT support, namely desktop and laptop computers and associated software for this additional person. The direct effect of having the EOM on board has been increased data storage and handling ability, structured programs for staff development and a general increase in the visibility of the SITC program.

## Credit and Non-Credit Higher Education

Enrollment in the community college level courses offered by SITC remains constant. As a milestone for the program, the Fall 2004 semester saw the enrollment of the 100<sup>th</sup> student to take one of four core courses of the Center. SITC courses continue to attract non-traditional students, career-changers and professionals seeking to enhance their professional portfolios. As many as 60% of some courses contain students who already possess an undergraduate or graduate degree. This is attributed to the increased awareness and impact that the Center is having on local student population. In addition to the traditional college-level courses, Center staff has been highly successful in attracting participants in non-credit classes offered by FMCC's Business & Industry Center and presented by SITC staff. Most popular are hands-on classes promoting the use of Global Positioning System receivers for recreational and casual use.

## Business Activities

With the addition of the EOM/OM, the Economic and Workforce development activities of the Center are on the rise. Non-disclosure agreements (NDAs) and collaborative arrangements are in affect with local businesses and governments. Most notably is ElectroMetrics Inc. of Johnstown, NY for the exploration of GPS opportunities, Oxxford Information Technologies of Hagaman, NY, who specialize in data warehousing and reporting, and Fulton County Tax Office, who supply local tax parcel data for Center use.

By adding the EOM/OM administrator to the full time staff, the Center is poised to seek additional revenue via contract agreements, new partnerships and broad collaborative relationships with education, business and government.

## Program Accomplishments & Events

In general, third year operations proved to be highly successful for the Center, which saw participation in local, regional, national and international taskforces, conferences and events. The activities listed below indirectly support the 12 national applications of NASA and the Earth Science Applications objectives. A brief chronological listing and description of the major events follows.

### October 2002

- New York State GIS Conference – participated in 18th Annual NYS GIS Conference in Liverpool, NY, attracting over 400 individuals, companies and government agencies. SITC hosted an informational display, in addition to attending various workshops and talks.
- FMEI Superintendent's Conference Day – The Fulton-Montgomery Education Initiative (FMEI) joined the Hamilton-Fulton-Montgomery Board of Cooperative Education Services (HFM BOCES) in hosting its first joint Superintendent's Conference Day for K-12 teachers and administrators. Over 300 professionals from the three school districts selected attended the full day sessions in Mayfield, NY. A keynote speaker from Boeing Corporation's Employee Council for Workforce Preparation was funded by the Center and provided information about what technology employers look for in skills, knowledge and abilities for the 21st Century.
- Center selected as GLOBE Train-the-Trainer site for summer 2003
- FMEI - GLOBE Partnership school recognized as a "Star" school (Northville CSD) for having contributed more than 10,000 environmental readings involving over 500 students

- NYS Education Department approved FMCC's A.S. degree in Logistic – first in SUNY to include GIS courses as core requirements for this major.
- Center completed a series of local presentations to the areas retired teachers associations. More than 200 retired K-12 educators, many still active, participated.
- Acid rain study team organized and met to investigate the possibility of developing a GIS portrayal of acid rain affects over time across the Adirondacks.
- *Mapping Our World* program begins – SITC faculty offer after-hour GIS training for K-12 teachers of the FMEI consortium. ESRI's ArcView is primary platform.
- Center provided NYS Department of Environmental Conservation with geographic data on 23 miles of trails and resources of the 4500 acres of the agency's Charleston State Forest in Montgomery County, NY.
- Middle school students of NY's Science and Technology Entry (STEP) program take part in a daylong instruction in GIS as part of the Center's ongoing support to the statewide initiative for at-risk minority youth.

#### November 2002

- Center director attended the Northeast ArcUsers Conference in New Hampshire, with more than 450 professionals from around the northeast and U.S.
- Local Economic Development Zone mapping completed for the Fulton County Economic Development Corporation - used as a decision support tool for local and state agencies promoting commerce and examining re-zoning issues.
- Criminal Justice faculty joined with Center staff to develop ongoing presentations to students majoring in CJ. Highly successful partnership.
- The Center invested more than \$20,000 in upgrading a seldom-used conference room to accommodate GIS operations and applications. A plasma screen, monitor, desktop PC and associated wireless hardware and software were installed. This resource was made available to the campus population when not in use by the Center.
- Announcements went out calling for applicants for External Operations Manager to fill the three-day per week position approved by FMCC Board of Trustees.
- REASoN CAN proposal (CAN-02-OES-01) submitted to NASA requesting \$2.8 M to continue and expand the operations of the Center at FMCC.

- Work began on an FMEI (Fulton-Montgomery Education Initiative) web page as an Internet presence for the 17 educational institutions and two Chambers of Commerce that make up the consortium.

#### December 2002

- Quarterly meeting of FME held and included a presentation by Fulton-Montgomery-Schoharie County Workforce Solutions System Executive Director, Ms. Gail Breen, regarding youth employment opportunities under the Workforce Investment Act, reports and discussions held on REASoN CAN grant proposal, FMEI web page development project, GIS training for K-12 teachers.

#### January 2003

- New Operations Manager Joins SITC – Mr. Girk Cakmak began work with the Center as first External Operations Manager, January 6<sup>th</sup>, on three-day week, *per diem* basis for nine months.
- Center Staff Visit Washington DC Visit – January 15 – 17 visit to Washington where they met representatives from GLOBE Headquarters, United States Geological Survey, National Imagery and Mapping Agency and National Geographic. Able to see first hand how GIS professionals conducted their trade and the skills they employed. Four separate agencies and organizations provided onsite tours, presentations and meetings for the SITC team. Possibilities for funding and internships were also discussed. Specific offices and individuals visited included:

##### GLOBE Headquarters:

- Karlene Rose, U.S. Partner Liaison
- Gary Randolph, U.S. Partner Liaison

##### National Imagery and Mapping Agency:

- Joan Mears, Public Affairs, Chief External Communications
- Tom Cooke, Deputy Director Public Affairs
- Scott Loomer, Science Advisor for Geospatial Sciences
- Jeffery Kretsch, Physical Scientist

##### USGS:

- Beth Stettner, Outreach Coordinator for Mapping Applications Center
- Jean-Claude Thomas, Science and Applications Center
- Cheryl O'Brien, Cartographer

##### National Geographic:

- Allen Carroll, Chief Cartographer
  - Jan Morris, GIS Project Manager
  - Bob Dalli, Chief, Intern Programs
- Staff Attend Software Training – *Migrating to ArcView 8*. Two-day training focusing on upgrading faculty skills to allow use of the newest version of ESRI GIS software. The training was conducted by ESRI certified instructor and adjunct faculty, Ms. Elizabeth Arabadjis.
  - Cayuga Community College Visit – FMCC President, Dr. Barry Weinberg, Vice Presidents John Jablonski and Dave Morrow, and SITC Director Mike Flinton met with Cayuga Community College counterparts and the senior representatives of the Institute for the Application of Geospatial Technology in Auburn, NY. Foremost on the agenda were FMCC's requests to revitalize a formal Memorandum of Agreement, establish written fiscal drawdown procedures and create a true exchange of operational - technology practices.
  - Heritage Corridor Commission Project Meeting –met with Mohawk Valley Heritage Corridor Commission in Canajoharie, NY. Fred Miller, MVHCC director, approached Senator Clinton about his future needs for our services and the need for funding regional GIS projects. SITC presented a series of maps produced for the Commission in both electronic and print formats.
  - Lamination Equipment added to Lab – installed 27" laminator to aid in the production of commercial GIS and cartographic products. Laminating charts graphs and maps are now possible on-site. Increased capability to support projects of the Mohawk Valley Heritage Corridor Commission.

#### February 2003

- Vice Chancellor Visits SITC – Dr. Preston Pulliams, State University of New York's Vice Chancellor for Community Colleges, visited SITC for overview presentation and GIS demonstrations.
- Fulton County Recognizes FMCC-SITC During Annual Report – Fulton County *State of the County* address recognizes the contributions of SITC giving examples of support to the community, i.e. Fulton County's hiring of its first GIS Technician.
- Classroom Goes Wireless – FMCC's primary classroom goes wireless for students and faculty who want network and Internet connectivity without physically plugging in. This directly aids and improves SITC capabilities.
- Education Operations Coordinator Visits Stennis – John Borst visits Stennis for GLOBE Partner Implementation Workshop. Three-day workshop

concludes with tour of Stennis Space Flight Center and meetings with Stennis staff.

- Center Hosts Day-long Discussion on NSF Funding Opportunities –SITC Staff host Ms. Peggie Weeks and Mr. Michael Hacker to explore the possibilities of becoming a National Science Foundation Advanced Technological Education (ATE) Center.
- New York Secretary of State Visit – Mr. Randy Daniels and three guests visited the Center with an eye toward economic development applications of GIS. SITC provided a tour and orientation talk that involved Mr. Daniels meeting the students of an evening Intro to GIS class, instructed by adjunct instructor, Liz Arabadjis.
- Staff Tours Local 911 Call Center – Mike Flinton and Rich Prestopnik of FMCC visited the Fulton County 911 Call Center on February 19<sup>th</sup>, accompanied by Electro-Metrics Inc. CEO Ken Bach. The three-member team is exploring how to incorporate GPS technology in the Emergency Response process for local and rural communities. Electro-Metrics and SITC have a long-standing relationship and have worked together on a variety of projects to date. The three-man team will visit Montgomery County facilities next and then meet to compare differences and similarities of operations before they proceed to design local-based tools.
- K-12 and Public Tours Resume at Center following winter recess –
  - Workforce Solutions Class Visits SITC – sixteen 9<sup>th</sup> –12<sup>th</sup> grade students from the Workforce Solutions class visited the SITC lab. Staff walks students through the lab's technology and discusses GIS, GPS and Remote Sensing and related the uses of these technologies to current world events.
  - BOCES Students visit SITC – sixteen 9<sup>th</sup> –12<sup>th</sup> grade students and 2 faculty members from the Hamilton-Fulton-Montgomery Counties BOCES. This presentation demonstrated Satellite Imagery and Aerial Photography technologies and applications.

#### March 2003

- SITC Represents FMCC at SUNY Day – March 3<sup>rd</sup>, FMCC President Dr. Barry Weinberg, Foundation Director Bill Easterly, SITC Director Mike Flinton and SITC Technical Operations Coordinator attended the annual State University of New York Day at the Convention Center in Albany. Sixty-four state universities and colleges display programs and operations to New York State legislators, staff and the public.

- GPS Applications – Staff met with criminal justice planner for Rensselaer County to discuss the possibility of working together to develop an early release program for parolees. This plan would include the monitoring of parolees using GPS (Global Positioning Systems) technology. Other applications in Criminal Justice for this technology were also discussed.
- Empire Zones – Fulton County Economic Development Corporation begins needs assessment review addressing changes to the county's current Empire Zones. This begins the process leading up to the annual resubmitting of the Empire Zone map.
- Campus Map – Operations Coordinator delivers map of the campus to the college, outlining new features, i.e. handicap accessible access points, emergency routes, etc.
- Center for Economic Development Presents Technology Roadmap Program – Capital Region's Center for Economic Growth Technology Council. The meeting provides details of the Capital Region's plans to attract technology employers. Seventy-five entrepreneurs, educators and representatives of state and local government attended the Albany meeting.
- Fort Plain Students visit FMCC – Fifty-five 6<sup>th</sup> and 7<sup>th</sup> graders from Fort Plain School District, Fort Plain, NY visited FMCC along with six faculty members. SITC provided four 45-minute presentations to the students. GIS, GPS and Remote Sensing topics were discussed and hands-on demonstrations of Satellite Information (J-track) and Aerial Photography (NYS GIS Clearinghouse) were conducted. This was part of the ongoing effort to bring Spatial Information Technology to the K-12 community.
- Summer Business Programs Priorities Set – SITC staff prioritize off-campus business opportunities for next six months, including: Mohawk Valley Heritage Corridor Commission projects, Development of Local Fire/Public Safety GIS products, work with the Offices of Rensselaer County in tracking paroled persons, among others.

#### April 2003

- AACC Convention – FMCC President, SITC Director and local representatives attend American Association of Community Colleges convention in Dallas, where they presented *NASA In New York*, an overview of the Spatial Information Technology Center and its collaborative efforts. Approximately 1500 professional educators and college administrators attended the convention.
- Letter of Intent Submitted – Director agrees to a Letter of Intent to join a consortium of higher education institutions seeking NSF funding to submit a

Remote Sensing in Agriculture proposal at invitation of Mr. Johnny Williams of Mississippi Delta Community College.

- Criminal Justice Project – prototype demonstration prepared for Rensselaer County Criminal Justice Department; maps location information for individuals on probation by using GPS data.
- SITC Funding Extended One-Year – Center receives approval of one-year, no-cost, extension from NASA.
- SITC Expands Funding Search – submitted requests, or secured portions, of more than \$5.7 million in funding to cover SITC operations and facilities upgrades between May 2003 and the end of FY 07.
- Latino Awareness Tour – presentation to thirty-four 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> grade students and two teachers from the Greater Amsterdam School District. These students were part of a program that identifies high-risk students and introduces them to Science and Technology programs.
- Summit In Tech Valley – 3<sup>rd</sup> annual *Summit In Tech Valley* in Albany, NY, an annual event attracting approximately 500 leaders in business, government and education. Discussions examine the Capital Region's efforts in attracting technology employers, programs and venture capital to the region. Presenters include New York State Governor George Pataki, State Senate Majority Leader Joe Bruno and State Assembly Speaker Sheldon Silver. Keynote speaker was Mr. Lou Dobbs, Anchor & Managing Editor of CNN's *Lou Dobbs Moneyline*. Contributions and potential of area community college's and their ability to deliver technology education is a focal point.

#### May 2003

- Semester Closes – Center concludes third year of instruction with some 90 students having enrolled in GIS-related courses over 36 months of operations.
- Non-credit Course Concludes - *GPS & You* – thirteen students participate in two-day hands-on GPS activities using ten Geocache locations preceded by discussions on GPS technology, receiver models, features, cost, etc.
- Workforce Investment Staff Visit – Fulton-Montgomery-Schoharie Workforce Solutions director and staff examine how their local Workforce Investment Board can help to promote jobs and career opportunities in the geo-spatial industry. Under the federal Workforce Investment Act (WIA), FMS Workforce Solutions is mandated to conduct workforce development, job training and education programs for a variety of unemployed and incumbent workers.

- NEARC Meeting – Center Operations Manager attends Northeast ArcUsers planning meeting in Groton, CT to meet GIS professionals from 13 state area and learn the latest developments in ESRI software and GIS applications.
- GIS Professionals Meeting – meeting of GIS professionals interested in promoting GIS and the Location-Information-System/Location-Based-Information industry within New York State. Twenty-five people attend New York State Department of Environmental Conservation hosted session discussing issues and challenges to GIS businesses. Focus was on the need for professional development, training, education and outreach.
- Mohawk Valley Heritage Magazine – SITC provides cartography and data developed for the Mohawk Valley Heritage Corridor Commission to new Mohawk Valley Heritage magazine for regional economic development promotion. Circulation for the magazine is estimated at 20,000 regionally.
- BOCES student visit FMCC - 96 juniors and seniors and 10 faculty members from 5 area school districts visit FMCC Tuesday and Introduction to the SITC program, with discussions about GIS, RS and GPS.
- SITC Trains Local Envirothon Team – one teacher and eight students of Oppenheim-Ephratah Central School meet with Center faculty as part of the school's *Envirothon Team*. Objective is to learn GPS technology. Activities involve lecture and Geocache search.
- FMEI GLOBE Teacher Selected To Assist With Training – Ms. Marcia Craft, 9th Grade Earth Science Teacher at Northville Central School, and a STAR GLOBE teacher, was invited by Maine Math and Science Alliance to assist with training in atmospheric protocol. This is an NSF funded project incorporating GLOBE atmosphere protocols (especially ozone) into Global System Science (GSS) modules. The GSS modules are developed by the University of California at Berkeley and are used by schools for Environmental Science. By incorporating GLOBE practices with these modules, they promote "hands on" science.
- SITC Presents To Retired Teachers – Education Operations Coordinator presents to Adirondack Retired Teacher's Association in Queensbury, NY, and discusses latest geospatial technologies and applications along with SITC's GIS projects and educational programs. Thirty-five retired teachers attended.
- Student to Create Tutorials for SITC – Empire State College student Grace Pogorzelski will work with the Center to complete her Multimedia Degree requirements by creating a variety of GIS/GPS-oriented tutorials.
- SITC Applauds GIS Program Graduates – First students awarded GIS academic credentials during the college's May 31<sup>st</sup> commencement

ceremonies. International student, Mr. Tomokazu Harada of Japan, awarded the Associate of Science degree in Spatial Information Technology. Ms. Emily Marino recognized earns one-year Certificate. Marino will also complete requirements in June 2003 for award of the A.S. from SITC.

- Director Recognized For Career Accomplishments – Professor Rich Prestopnik, SITC's founding Director, was recognized during commencement ceremonies as the first ever recipient of the State University of New York Chancellor's Award for Academic and Creative Excellence. Prestopnik received recognition for many career-long accomplishments. Among his most notable achievements were serving a Fellowship with NASA, his guiding role in establishing the Fulton-Montgomery Education Initiative, and creation and staffing of the Spatial Information Technology Center.

#### June 2003

- Local Business Presented With Map of Steamboat Route – Center director and staff present President of the Lake George Steamboat Company with a SITC generated map of steamboat routing across Lake George, NY. The map contains tour routes promoting Revolutionary War history and local points of interest.
- Archeologist working with SITC – Ms. Susan Winchell-Sweeny an Archeologist affiliated with Bard College visited requests assistance and use of the SITC lab and large format scanner to produce several maps of Bard College campus and facilities.
- SITC Pricing – Operation Manager and Operations Coordinator, develop pricing structure for non-academic and business related uses of Center hardware, software and facilities to help local government agencies as well as businesses.
- USGS Supplies Maps To SITC – Center receives multiple copies of high quality maps of the Pakistan, Afghanistan and India regions of the world as a gift from the United States Geological Services. Products use multi-color satellite imagery as base-maps to study earth science and non-demographic related issues.
- Center Staff Visit Plattsburgh State University – SITC administrator and faculty meet with faculty and head of the Universities' Earth and Environmental Science Department to advance an articulation agreement and tour the Remote Sensing lab at Plattsburgh. The team discusses each college's GIS operations and programs and agree that an articulation agreement could be accomplished using SITC's A.S. degree as the primary transfer program.

- Charleston State Forest – New York State Department of Environmental Conservation holds Town Hall style public Meeting to discuss the resource management of the Charleston State Forest. Center staff attend and include a presentation of planned management of the lands followed by question and answer period. Approximately 60 property owners and local residents attend.
- Administrators Attend Capital Region Growth Presentation – FMCC Administrators participate in forum at Sage Colleges in Albany hosted by Public Relations Committee of the Hudson-Mohawk Association of Colleges and Universities. Discussion included examination of the roles of our region's colleges and universities in the emerging regional economic development initiatives collectively known as "Tech Valley."
- NSF Recommends Full Proposal of SITC ATE Project – Center's Preliminary Proposal for an NSF ATE Project receive recommendation that the College submit a full Formal Proposal not by October 15, 2003. The Preliminary Proposal outlines a plan to design, develop and implement GIS curriculum and professional development programs for the K-14 community using the national geography standards. MSU Social Science Research Center offers to assist in developing the proposal, which requests \$900K over three years.
- MDCC President & Vice President Visit Campus – Mississippi Delta Community College's president Dr. Larry Bailey, and Vice President for Instruction and Education Services Dr. Lynda Steele, and spouses, visit campus and Center to discuss its vision, mission and operations.
- GIS Center RFP Bids Examined – ongoing effort to design and fund a stand-alone GIS facility at FMCC result in responses to SITC's Request for Proposal for architectural design studies. Candidates address call for bids as a result of FMCC's Master Plan and Facilities Steering Committee activities, which include other RFP's and capital projects for the college. SITC RFP funded via a \$75,000 Housing and Urban Development (HUD) grant.
- SITC Lab upgrade – ESRI's ArcGIS 8.3 software installation completed as part of program-wide software upgrade.

#### July 2003

- REASoN CAN Grant Proposal Feedback – Center receives notice from NASA Hq. That it was not selected for a REASoN CAN grant award. Summary Evaluation requested. NASA receives 258 proposals, with 41 selected.
- SITC Presents at CORSE Conference – Education Operations Coordinator and area K-12 teachers attend IAGT's Conference on Remote Sensing Education (CORSE) 2003, designed to provide teachers information on how

to use Geographic Information Technology (GIT) in the classroom. Mr. Borst's presentation focused on SITC's activities in the K-12 community, specifically addressing SITC Summer Camp, SITC's *Mapping Our World* program, and the various outreach programs that SITC has performed for the FMEI school districts.

- FMCC Hosts NSF Workshop – Center assists and facilitates 32 educators from across the state taking part in weeklong NSF discussions. The National Science Foundation has awarded a three-year \$1 million Advanced Technological Education (ATE) grant to a consortium comprising Hofstra University, the New York State Technology Education Association (NYSTEA), and five SUNY colleges including FMCC. The College and Center are the location for the workshop which purpose is to strengthen and advance technology education in New York State through a professional development collaborative for technology education teachers from around the state. FMCC will be designated one of five training centers for teachers over the next three years.
- ESRI Users Conference – Operations Manager attends weeklong ESRI International User Conference, in San Diego, CA, meeting with ESRI staff, discussing possible partnerships, and attending technical workshops. More than 12,000 people attended from some 100 countries.
- SITC Summer Camp – Five-day summer program for ten high school students and 5 middle school students. Educational activities include using GPS receivers for local geocaching, taking aerial photographs with kites, and performing heads-up digitizing using GIS software to create maps of the FMCC campus. PowerPoint presentations created by students can be found at: <http://faculty.fmcc.suny.edu/borst/Summer/03/summer03.htm>
- SITC-FMCC Invited to Join Grant Collaboration Team – SITC director joins 21 other local representatives from education, government and non-government organizations to discuss submitting a grant proposal for Federal and State funds under the 21st Century Community Learning Centers program. Initiative will focus on middle and high school populations of Fulton and Montgomery Counties.
- Cornell University Geospatial Information Repository (CUGIR) – Operations Manager and Center faculty visit Cornell University campus to staff who operate and maintain the CUGIR website and GIS repository. Topics include website management, standardization of data and metadata management.
- SITC Offers GPS & You Non-Credit Course – Third annual offering of non-credit GPS course that introduced students to the science and application of Global Positioning Systems. Twelve adult students attend two 3-hour classes.

- Congressional Subcommittee Supports SITC Funding - The Center and the College learns Congressional Subcommittee responsible for the initial mark-up of the FY 04-05 budget has supports \$300K for the operational budget of SITC. This is approximately one third of the amount requested. In addition to other grants applied for, this amount will work toward growing the program's fifth year of operations.
- Tax Parcel Maps Provided By County - Fulton County's tax parcel maps will be sent to SITC by Frank Parker, Director, Fulton County Real Property Tax Services Agency agree to provide county tax parcel maps and data to be used by the Center for economic development initiatives.
- USDOL Geo-spatial Technology Workforce Development Forum – Center Director attends USDOL-hosted WFD Forum in Washington, joined by more than 40 other WFD and Geo-spatial technology professionals to exam the industry and discuss issues pertaining to it's definition, structure and development. Director met with Dr. Kirk Sharp of NASA, and Dr. Jon Carr of SMU and discussed plans for a SITC staff trip to Stennis in September. Details on the USDOL ETA program to be reported as the initiative unfolds.
- SITC Program Begins Five-Year Review Process – Center professional staff met with FMCC Dean of Business, Technology & Health Professions, and Mr. Austin Fisher of Applied GIS joined by Ms. Stephanie Diamond of New York State Department of Environmental Conservation, to begin state-mandated program review and assessment of the Center's current academic program. The review is a requirement of the State University of New York's to assess higher education programs using independent evaluators, once every five-years.
- Reinman Sanctuary Presentation – Operations Manager presents GIS, GPS and RS technologies not-for-profit wildlife program sponsored by the R.J. Reinman Sanctuary. Presentation emphasizes Center's capabilities and projects. Twenty residents attend.
- Maps Delivered to EDC – Education Operations Coordinator delivers maps to the Fulton County Economic Development Corporation in support of local parcel development project that EDC is working on.
- English as a Second Language ESL – Technical Operations Coordinator presents to groups of ESL students. Forty-one students participate.
- Adirondack Park – Faculty complete map of the Adirondack Park to be published as part of a forth-coming book entitled *Significant Water Falls in the Adirondack Park*. Co-authors Barbara Delaney and Russell Dunn visit SITC to discuss collaborating on maps to enhance local books.

- Johnstown Public Library Summer Program – As part of third annual summer program, faculty visit Johnstown Public Library to work with local elementary children. Global Positioning Systems are discussed and demonstrated.

#### August 2003

- Student Distribution Data Project – Operations Manager and staff establish reliable database of past and present FMCC student information and converted it to a Personal GeoDatabase using ArcGIS 8.3 (ArcMap, ArcCatalog and MS Access). This database program will serve as the foundation for future mapping of student enrollment sources by personal address, zip codes, school districts, etc.
- Web Site Development Software Purchase - *Macromedia Studio MX* software selected to improve Center's Internet presence. Two educational and one commercial package will keep development costs low while insuring adequate training resources.
- SITC Staff Assist Chamber in IT Upgrade – Program Director and Operations Manager assist Fulton County Chamber of Commerce in assembling and formatting a Local Area Network. This voluntary contribution provides the Chamber staff with improved technological tools to enhance their operations.
- Center Director Attends Administrator's Forum – Program Director attends Cornell University's three-day *Community College Administrative Leadership School* in Ithaca, NY. Fifty-four administrators from two-year colleges around the nation take part in instruction on dynamic strategic planning and issues for community colleges.
- Community Interest Forum – Fulton County Economic Corporation hosts open community forum to solicit input for potential uses of a former public school complex in Gloversville, NY. A vacant six and a half acre property is studied for a variety of uses and/or demolition. SITC invited by EDC to produce aerial photographs and poster-size renderings of the property to aid in the discussion. One hundred local citizens and businesses view program supplied imagery and maps.
- NASA Business & Industry Conference – Administrators attend the Northeast NASA Business & Industry Conference in Albany, NY, a two-day event attracts more than 100 contractors and individuals interested in doing business with NASA.
- GIS/GPS Tutorials Delivered – Empire State College student delivers two tutorials to SITC. Using Macromedia Flash software, the tutorials provide

overview of the Global Positioning Systems and illustrate use of NYSGIS Orthoimagery Applications. View tutorials at <http://www.sitc.cc/tutorials.htm>

- Sage College of Albany Invites Transfer Agreement – Sage College of Albany visits Center faculty to discuss transfer agreement possibilities, most promising are Business Administration, Computer Information Systems, and Information Design degrees.
- SITC Aid Requested in Preparing College Lab – FMCC Faculty request program assistance in preparing Fall 2003 Environmental Science course. Program faculty creates a two-part lab.
- Aerial Photographs Provided to FMCC Instructor – Faculty develop and supply aerial photographs of FMCC campus to Multimedia faculty for his use in redesigning college Internet material.
- Career Information Supplied To Education Consortium – Principal of three-county Career and Technical Center requests GIS and Geospatial-related industry jobs, titles and career forecast information. SITC provides a Wage and Salary Survey report accompanied by a customized presentation. Information will be used at local high school for seniors. Future programs may be located at SITC - FMCC.
- Cayuga Regional Economic Center Dedication – SITC Director represents FMCC at dedication of Cayuga Community College's Regional Economic Center, housing NASA's Regional Application Center for the Northeast and the Institute for the Application of Geospatial Technology. Meets with Ron Birk, Director of NASA's Earth Science Application Division to discuss current initiatives with Stennis.

#### September 2003

- Fourth Year Academic Program Begins – FMCC and the Center begins fourth year of operations by offering Introduction to GIS. Program sees 100<sup>th</sup> student enrolled in one of four core courses offered by SITC.
- Quarterly Education Workgroup Meets – Education Ops Coordinator attends quarterly meeting of New York State GIS Clearinghouse Education Workgroup in Albany, NY. Workgroup establishes its mission statement, discusses current methods of integrating GIS technology with K-12 schools, and receives update by New York State ESRI manager on GIS programs for K-12 schools.
- Accreditation Team Visit – Middle States Accreditation Team representatives visit to examine management aspects of the college and programs, meet with students and collect public comment on the college.

- Survey Development Progress – FMCC president request survey to help geographically display student demographic information. A second, online, survey requested by newly formed NYS GIS/LIS group poles 185 GIS professionals across New York State to assess need for a professional GIS association. The results of the first study will be provided to college board of trustees and local elected officials. Second survey findings will be presented at the New York State GIS Conference in October 2003.
- Equipment Inventory Completed – A complete review and update of SITC's inventory in both hardware and software conducted. Inventory reflects the complete assets of the program.
- University of Maine Visits Center – Dean of the College of Engineering, University of Maine, toured the Center accompanied by administrators of university's Computer Connection – Information Technologies program and Advancement Officer for the University. Visit requested by CEO and President of ElectroMetrics of Johnstown, NY. University of Maine operates the Spatial Information Engineering Center ([http://www.spatial.maine.edu/Research/SIE\\_research.htm](http://www.spatial.maine.edu/Research/SIE_research.htm)) a GIS program for undergraduate and graduate students.
- Pictometry Visual Intelligence Presentation at SITC – New York Regional Sales Manager of Pictometry Visual Intelligence ([www.pictometry.com](http://www.pictometry.com)) presents remote sensing products and services of company to 15 officials of Fulton County and four members of the college in an effort to raise awareness of the applications and utilities of her aerial photography for local government. County officials agreed oblique aerial imagery would greatly enhance the services provided by the county and discuss presenting this information to the full county board of supervisors. Cost-sharing arrangement will have to evolve in order to cover the costs of flying the entire county and providing the imagery to all agencies.
- FMS Workforce Solutions System Host Presentation – SITC and College host 32 local healthcare leaders for presentation on obtaining GIS training and professional development for their staff through the local workforce investment board programs. SITC and FMCC offer unique position of offering training and education to employers and job seekers, as well as hiring local workers for a variety of programs.
- SITC Participates in New York State GIS Day – Program Faculty attend New York State Government Technology Conference (GTC) in Albany, NY. Governor George Pataki declares September 17, 2003, New York State GIS Day. Faculty staff information kiosk in Capital complex outlining program accomplishments.

- *Doing IT Business with NYS* – Operations Manager joins 200 IT professionals to attend New York State Forum for Information Resource Management, titled “*Doing IT Business with NYS, Where do I begin?*” Sessions targeted at NYS businesses offering IT-related products and services and geared to provide detailed information on contracting issues for information technology-related business. There were approximately 200 participants.
- Highland Geographic Owner Partners With SITC – Principal and senior software engineer of Highland Geographic of Lake George, NY agrees to consult and advise with SITC in return for use of the Center’s equipment (scanner, digitizer). Company project will establish electronic files of land parcels and tax maps for Hamilton County, NY.
- NSF Grant Proposal Nearing Completion – Center completes \$900,000 NSF Grant Proposal entitled *GIS Across The Curriculum* in collaboration with MSU Social Science Research Center.
- SITC A.A.S. Degree Presented – Faculty submit two-year degree proposal to College’s Technology Division and gains initial approval. Proposal will flow through on campus process to become permanent program addition.
- Mohawk Valley Heritage Corridor Commission Requests Maps – Operations Manager contacted by MVHC Commission to produce maps delineating political boundaries State Senators, Legislators and Congressmen within the corridor. The maps completed and delivered electronically and in laminated print format.
- K-12 Computers Installed – two FMEI schools received loaned desktop PCs and associated hardware and software as part of Mapping Our World professional development program offered by SITC and FMEI.
- Chamber President Receives Program Orientation – Incoming Fulton County Chamber of Commerce president visits Center for first-hand look at GIS applications for local business. Ops Manager presents Center’s past support of the chamber and ideas for future support, including use of web-based GIS to promote county resources and chamber members.
- *Tech Valley* Photographer Covers Program Story – Professional photographer visits SITC as part of the 17-county consortium’s efforts to promote high-tech growth in our region. Initiative involves nation-wide marketing and promotion campaign featuring professionally produced magazine addressing region’s best high-tech resources. SITC will be the only higher education program photographed for the upcoming magazine. Copies to be forward to recipients once available.

- Mohawk Valley Heritage Corridor – The NYS Mohawk Valley Heritage Corridor Commission undergoes annual state audit. SITC supplies fiscal reports on past year's support to the commission.

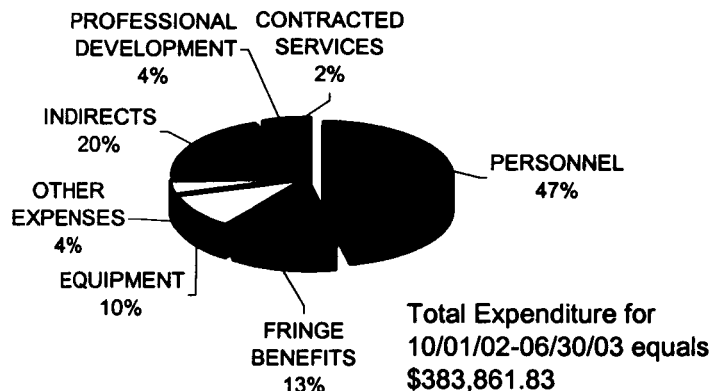
## Fiscal Expenditures

This document provides a general overview and summary of the operational budget of the Spatial Information Technology Center (SITC) at Fulton-Montgomery Community College (FMCC) under Research Grant, NAG 13-00043 concluding June 30, 2003, and NAG 13 – 02053 with drawdowns beginning June 01, 2003. This is a general overview and summary. Please direct any questions or inquiries to Director, Spatial Information Technology Center, Fulton-Montgomery Community College, Johnstown, New York.

## NAG 13 – 00043 General Expenditures

This report details the drawdowns of NAG 13 -00043 funds during FY 02 – 03 (01 Oct 2002 – 30 Sep 2003). Total expenditures equal \$383,862 (all numbers have been rounded). NAG 13 – 00043 was utilized as a one-time no cost extension from its original award.

## Distribution of Funds NAG 13-00043



## Indirect Rate (Facilities & Administrative)

Funds totaling \$76,474, or 19.92% of total drawdown, were taken by Fulton-Montgomery Community College, as allowable Indirect costs for Facilities and Administrative operations. This figure is less than the negotiated Indirect rate of 35.2% due to the cost of Equipment category purchases being deducted from the total expenditures on which the Indirect rate is computed. The Indirect Rate was therefore only charged against the non-equipment funds expended by the grant, such as Personnel Costs, Fringe Benefits, Contracted Services, Professional Development, Travel and Other Expenses.

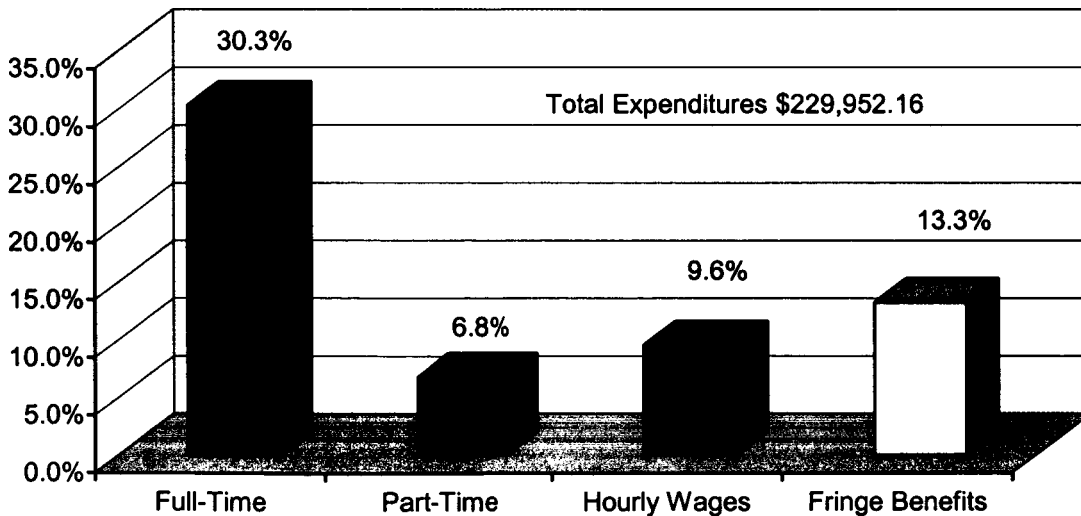
The facilities and services provided to the grant program by the college include five administrative offices, one meeting-conference room, a storage-resource room, and a classroom-lab with adjacent equipment room. Associated with these facilities are the normal electrical services, heating/air conditioning and custodial services. As staff and faculty of the college, SITC personnel have full rights and privileges of the resources of the institution.

### Personnel Costs

The personnel costs, including Fringe Benefits, totaled \$229,952, or 59.9 % of NAG 13 – 00043 expenditures. By staffing category and percentage, personnel expenditures included:

Full Time, Professional (3):	\$116,339	30.31 %
Part Time (5):	\$ 26,069	6.79 %
Hourly Wage (1):	\$ 36,682	9.56 %
Fringe Benefits, all personnel:	\$ 50,862	13.25 %

### Distribution of Personnel Costs NAG 13-00043 10/01/02-06/30/03



Spatial Information Technology Center staff for NAG 13 – 00043 includes the following positions:

Director, (Administrator)  
External Operations Coordinator (Administrator, part time)  
Technical Operations Coordinator, (Faculty)  
Education Operations Coordinator, (Faculty)  
Program Secretary, (Clerical/Administrative Support)

The Director's position is a 12-month position, established at the equivalent of an academic dean, on the staff of the college and reporting to the vice president of the college.

The newly appointed External Operations Manager position represents a newly authorized position; beginning January 2003, on a three-day per week per diem contract.

Technical and Operations Coordinators are Non-Teaching-Professional (NTP) Faculty positions serving on 39 weeks contracts for the academic year and on per diem contracts to meet the requirements of the Center the remainder of the year.

Program Secretary is a 12-month clerical position.

Adjunct faculty, facilitators, consultants and similar positions are funded and reported in this document under the Contracted Services and Other Expenses categories of the report.

Fringe Benefits include the same compensation and benefits packages provided to other employees of the college who hold comparable positions, i.e. health care, retirement, etc.

#### Equipment

Equipment costs for the FY 02 – 03 operations year totaled \$39,611, or 10.32 % of total drawdowns, and are exempt when computing the total Indirect Rate provided to the college.

This year's operations included upgrades of some staff desktop operating systems, laptop computers and classroom/network server (see Final Property Report). In addition, as part of the Center's K-12 teacher professional development program, Mapping Our World, a total of 8 desktop computers, printers and associated hardware were purchased for installation in public schools of the Fulton-Montgomery Education Initiative (FMEI).

The Center's facilities were significantly enhanced by the college installing wireless network capability in the classroom and offices adjacent to SITC.

#### Professional Development/Travel

Professional development and technical competency remained integral parts of the Center's ability to continue operations. To support that philosophy, Center staff continued to be encouraged to seek and accept opportunities to maintain proficiency and upgrade their skills. Of particular note are the activities of the newly hired External Operations Manager. Total expenditures for Professional Development represent 4.35% of the operating budget, or \$16,670. Included in this category are associated costs for travel, lodging, meals, registration and reimbursements for expenses allowable under the grant and college guidelines. Specific examples of events and programs attended by staff included:

New York State Office for Technology – Quarterly Educational Forum meetings, New York State GIS Conferences, and presentation at the New York State informational forums in Syracuse and Albany, New York. A minimum of two staff members normally attend such events.

NEARC Conference – the program director attended and presented the SITC program at the Northeast ArcUsers Conference in New Hampshire.

Washington DC Visit – the program director and two faculty traveled to the Washington area to visit a variety of world-class quality geospatial technology users, including NIMA, USGS, National Geographic Society and NASA's GLOBE Headquarters.

ESRI Conference – the External Operations Manager attended the annual International Educators and User's Conference of software producer ESRI, in San Diego, CA. This is the third year Center professional participated. The four-day event attracted an estimated 12,000 professionals from more than 100 nations.

CORSE 2003 – the Center's Education Operations Coordinator and three K-12 educators of the Fulton-Montgomery Education Initiative were funded participants at the Conference on Remote Sensing in Education, CORSE, hosted by NASA-funded colleagues at Cayuga Community College's Institute for the Application of Geospatial Technology. The Education Operation Coordinator and teachers were able to network, present materials and participate in three days of discussion and demonstration of technology and GIS programs.

Curriculum/Faculty Development – the director and two faculty members frequently represented the program and college in a variety of in-state forums hosted by the State University of New York (SUNY) or private institutions. These events continue to focus on issues of economic and workforce development, curriculum and program development, or general education. The benefits to the program became evident as we worked to incorporate GIS across the college curriculum and into the K-12 community.

FMEI/Teacher Training – the Fulton-Montgomery Education Initiative remains one of the cornerstone programs of this grant and the consortium continues to benefit by the professional development opportunities offered by SITC. Grant operations have funded teacher orientations, demonstrations and activities to introduce the concepts of GIS, GPS and Remote Sensing to K-12 teachers and administrators. A variety of activities took place that called for program staff to visit public schools and community events to discuss and demonstrate our technology. Costs incurred in those activities were charged to Professional Development where applicable.

### Contracted Services

Contracted Services of the grant equaled \$5,806 or 1.51% of total costs. This amount represents a \$28,448 reduction in previous year expenditures for this category. This is directly attributable to the increased capacity and knowledge of the Center's full time staff, and the newly hired External Operations Manager. The role of adjunct faculty, facilitators, and other direct support personnel was reduced as the Center staff shifted higher education courses to day-time faculty and began performing multi-media and webpage management function in house. In addition, the previously active relationship between Mississippi State University's Social Science Research Center and SITC saw less activity than the first two years of operations when the Center experienced a high need for research and data.

A contract facilitator was once again hired to assist with the delivery of some of the K-12 programs of the Center, such as the SITC Summer Camp for Teens. These programs and informational forums have been highly successful in reaching non-traditional students. Also included were local and state level presentations to organizations such as the Science and Technology Entry Program (STEP) for minority middle and high school students.

Contracted services for equipment included an office copier, office campus printing of brochures for the SITC program and for the FMEI consortium.

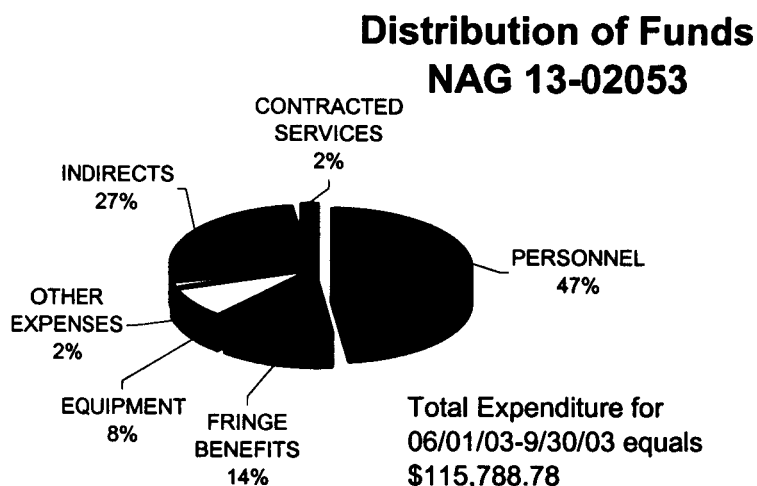
### Other Operational Expenses

Other Operational Expenses were \$15,323, 3.99% of total costs. Costs incurred this year related to support of the new External Operations Manager, increased outreach activities to the member schools of the Fulton-Montgomery Education Initiative and activities within the Center. This area also includes an approximate \$3,100 fee for the Center to subscribe to the SUNY ITECH (State University of New York Information Technology) consortium, which entitles the Center, through the College, to purchase needed GIS software and licenses at greatly reduced prices. This is the primary

mechanism that allows the Center to supply software to other departments, programs and authorized individual users.

### NAG 13 - 02053 General Expenditures

Access of NAG 13 – 02053 funds began in June 2003 to continue the approved operations of the final three months of the third year operations for the Center. Drawdown on this award through September 2003 amounted to \$115,789 and is detailed at right.



The Spatial Information Technology Center requested and gained approval of a one-year, no-cost, extension of NAG 13 – 02053 and intends to continue operations of the Center through September 30, 2004. This means that the funds from this award will actually support operations for a total of 16 months (June 2003 – September 2004), hence particular attention has been given to expenditures in order to insure the funds will cover this extended period. The following is a breakdown of NAG 13 – 02053 expenditures for the first four months of the 16-month funding period (June 2003 – September 2003).

#### Indirect Rate (Facilities & Administrative)

Indirect rate deducted by the college for this period is \$30,919, or 26.7% of expenditures, which continues the college's trend of claiming considerably less than the allowable 35.2% authorized by the federal government for this award.

#### Personnel Costs

Staffing costs, a combination of direct wages and salaries equaling \$55,505, or 47% of operational funds for this period, or plus fringe benefits of \$15,636 (13.5%), total \$71,141, or 61% of funds expended. Notable issues involving staffing include the fact that the *per diem* contract for the External Operations Manager's salary expired on August 31<sup>st</sup>, 2003 and the full-time administrator position of Operations Manager began on September 1<sup>st</sup> of this year at a base salary of \$49,000, plus benefits. In addition, no hourly wage (Program Secretary) expenditures have been claimed for the June –

September time frame as that salary was met by the remaining monies of NAG 13 – 00043 (see financial report of NAG 13 – 00043 earlier in this report).

#### Equipment

Hardware purchases totaled \$9,470 (8.18%), which included purchase of desktop computer systems for FMEI K-12 schools, upgraded printers for Center staff, computer memory hardware, etc (see Final Property Report).

#### Professional Development/Travel

Similar to hourly wage costs described above, professional development and travel expenditures for summer 2003 were primarily covered by the remaining funds of the previous award. Costs in this category were associated with the Director attending a July USDOL-hosted Geospatial Industry Workshop Forum in Washington DC, a summer workshop for community college administrators at Cornell University and the Operations Manager attending the ESRI Education and International Users conference in San Diego, CA, in July, in addition to staff attending a variety of in-state trainings, conferences and meetings. Staff is not paid for local vicinity travel, but is reimbursed for expenses at the authorized rates for out of area events.

#### Contracted Services

Expenditures of \$2,223 (1.92%) under contracted services include monthly rental of office copiers and facilitators (two) to augment K-12 summer programs.

#### Other Operational Expenses

General supplies, office supplies, curriculum materials, audio-visual aids and a variety of academic publications and periodicals represented a total of \$2,034 (1.76%) of total expenditures.

## Final Property Report

Sponsoring Agency:

National Aeronautics & Space Administration  
John C. Stennis Space Center

Award: NAG 13 - 00043

Date	Vendor	Voucher #	Amount	Received	Description
9/12/2002	U.S. Geological Survey	42023	\$173.00	10/1/2002	Topographic Maps
9/26/2002	Audio Video Corp.	42262	\$21,851.00	12/7/2002	Conference Room/AV Equip
10/5/2002	Dell Marketing	42366	\$5,872.95	12/23/2002	Power Vault
10/17/2002	Dell Marketing	42541	\$1,792.00	11/14/2002	Dimension 4500 tower
10/17/2002	Dell Marketing	42543	\$1,611.00	11/14/2002	Dimension 4500 desktop
12/4/2002	National Graphic Supply	44139	\$871.54	1/25/2003	Laminator
2/26/2003	Dell Marketing	45005	\$5,645.00	3/21/2003	Dimension 4550
2/26/2003	Dell Marketing	45004	\$915.00	3/21/2003	Printer, Deskjet 5550
3/13/2003	Gov Connection	45318	\$282.70	3/14/2003	Replacement Lamp
11/8/2002	Command Anti-Virus	42924	\$467.75	12/23/2002	Multiplatform Client & Server
1/8/2003	PC Connection		\$38.95	1/8/2003	Serial Card
2/10/2003	Dell Marketing	44779	\$90.60	2/19/2003	Memory Upgrade
			\$39,611.49		

Award: NAG 13 - 02053

7/31/2003	Bank Card		\$134.57	7/31/2003	GPS Cable & Framing
2/26/2003	KI	44775	\$2,412.89	8/5/2003	Office Furniture, 135K
6/27/2003	Dell Marketing	47220	\$2,843.00	8/26/2003	Inspiron 8500
6/30/2003	Dell Marketing	47302	\$4,079.85	8/26/2003	Dimension 4600
			\$9,470.31		

This concludes the Fiscal Expenditures reports for NAG 13 – 00043 and NAG 13 – 02053. Total expenditures for the combined awards are \$499,650. Fulton-Montgomery Community College, including the Spatial Information Technology Center have undergone an annual audit and financial management review during this reporting period and have been recognized as having sound fiscal programs and practices. Funds from each of the awards are professionally managed through the cooperation of the staff of the Institute for the Application of Geospatial Technology at Cayuga Community College and the staff of Fulton-Montgomery Community College in conjunction with the director of the Spatial Information Technology Center.

## Fourth Year Budget Forecast

The following is a condensed version of the Center's current year (October 2003 – September 2004) operational budget.

**NAG 13 - 02053**  
**Fulton-Montgomery Community College**  
**Spatial Information Technology Center**  
**October 2003 - September 2004 Budget**

<b>Description</b>	<b>Amount</b>
Director, SITC 12 Month @ 100% FTE (Administrator)	\$53,000
Operations Manager, 12 Month @ 100% FTE (Administrator)	\$49,000
Technical Operations Manager, 1.0 FTE NTP (39 week contract)	\$38,915
Education Operations Coordinator, 1.0 FTE NTP (39 week contract)	\$37,809
Fifty day per diem contract for Technical Operations Coordinator to support Summer Programs, contract work & grant programs	\$9,406
Fifty day per diem contract for Education Operations Coordinator to conduct Summer Programs, FMEI & GLOBE	\$9,222
Administrative Support - Clerical 1.0 FTE	\$34,000
Student Aides, Interns	\$4,000
Clerical Overtime	\$1,500
Computer Hardware Replacement	\$15,000
New Equipment	\$20,000
Printing: includes support of FMEI, GLOBE, etc.	\$6,000
Professional Development: includes SITC staff & FMEI K-12 teacher staff development activities	\$20,000
Advertising - Outreach	\$6,000
Publications	\$10,000
Supplies (Educational, i.e. software, and non-equipment)	\$12,000
Office Supplies (previously contained "Other Supplies" needs)	\$6,000
Equipment Lease/Rental - i.e. Office Copier	\$6,000
Books & Periodicals: SITC Lab Books, GLOBE books, support to Evans Library, etc	\$4,500
Estimated Indirect (Facilities & Administrative) estimated at 35% & excludes Equipment purchases	\$115,000
Training Site Costs: GLOBE Partnership T-T-T, K-12 GIS Teacher Training	\$8,000
Transportation: NASA visit, GIS Conferences, AACC, local travel	\$16,200
Contracted Services, SUNY ITECH, GLOBE & FMEI Assistance, Adjuncts & Proposal Assistance	\$25,000
Employee Benefits	\$60,000
<b>Totals</b>	<b>556,552</b>

FMCC/SITC STAFF REPORT FORM

SUMMARY REPORT

NASA EDUCATION PROGRAMS

STENNIS SPACE CENTER

Fulton Montgomery Community College/Spatial Information Technology Center

FROM 01-Oct-2002 TO 30-Sep-2003 ( FY2003 )

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Number of Reports Entered: 164

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**Program Title:**

Fulton Montgomery Community College/Spatial Information Technology Center

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ACTIVITIES/PRODUCTS/SERVICES

<u>Choice</u>	<u>Number</u>
Meeting	55
Presentation	47
Product/Service	19
Tour of Facilities	20
Workshop/training	23
<i>Nothing selected</i>	<i>0</i>

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PARTICIPANT COUNT TOTALS:

	Physical Presence		Distance Learning	
	<u>Number</u>	<u>Percentage*</u>	<u>Number</u>	<u>Percentage*</u>
<b>A. DIRECT PARTICIPANTS:</b>				
<b>1. TEACHERS:</b>				
Total K-12 and In-Service Teachers:**:	811	28.07	0	0
Teachers teaching grades K-4:	18	2.22	0	0
Teachers teaching grades 5-8:	45	5.55	0	0
Teachers teaching grades 9-12:	86	10.6	0	0
In-Service Teachers:	303	37.36	0	0
<b>2. HIGHER EDUCATION FACULTY:</b>				

Community College:	61	89.71	0	0
4 year undergraduate:	2	2.94	0	0
4 year undergraduate/graduate:	5	7.35	0	0
<b>Totals:</b>	<b>68</b>	<b>2.35</b>	<b>0</b>	<b>0</b>

### 3. STUDENTS:

K-4:	13	1.41	0	0
5-8:	255	27.6	0	0
9-12:	265	28.68	0	0
Community College:	388	41.99	0	0
4 year undergraduate:	3	.32	0	0
4 year undergraduate/graduate:	0	0	0	0
Pre-Service Teachers:	0	0	0	0
Post Doctoral:	0	0	0	0
<b>Totals:</b>	<b>924</b>	<b>31.98</b>	<b>0</b>	<b>0</b>

### 4. ADDITIONAL PARTICIPANTS:

State Dept of Ed officials:	0	0	0	0
Local K-12 Education officials:	243	86.79	0	0
University/CC officials:	14	5	0	0
Federal government officials:	2	.71	0	0
State government officials:	11	3.93	1	100
Local government officials:	10	3.57	0	0
Professional organizations:	9	1.12	0	0
Business sector representative:	166	20.62	0	0
Community representative:	38	4.72	0	0
Civic group:	37	4.6	0	0
Parents:	3	.37	0	0

Others:	552	68.57	0	0
<b>Totals:</b>	<b>1085</b>	<b>37.56</b>	<b>1</b>	<b>.03</b>
<b>Total of All Direct Physical Presence Participants:</b>	<b>2888</b>	<b>99.97</b>		
<b>Total of All Direct Distance Learning Participants:</b>			<b>1</b>	<b>.03</b>
<b>TOTAL OF ALL DIRECT PARTICIPANTS: (From A)</b>	<b>2889</b>	<b>.72</b>		
<b>PARTICIPANTS:</b>				
<b>B. EDUCATION COMMUNITY:</b>				
K-12 Teachers:	0	0	0	0
K-12 Students:	0	0	0	0
Higher Ed Faculty:	0	0	0	0
Higher Ed Students:	0	0	0	0
Other (Administrators, Parents, etc.):	0	0	0	0
<b>TOTAL OF ALL EDUCATION COMMUNITY PARTICIPANTS: (From B)</b>	<b>0</b>	<b>0</b>		
<b>C. GENERAL PUBLIC/MEDIA AUDIENCES:</b>				
	<u><b>Number of Participants</b></u>	<u><b>Percentage *</b></u>		
Conferences/Conventions/lectures/museums/booths/etc:	8360	2.1		
Estimated Newspaper/Magazine/Audiences:	30800	7.75		
Estimated TV/Radio Broadcast Audiences:	350000	88.11		
Estimated CD-ROM Users:	0	0		
Other:	8087	2.04		
<b>TOTAL OF ALL PUBLIC PARTICIPANTS: (From C)</b>	<b>397247</b>	<b>99.28</b>		
<b>SUBTOTAL OF SECTIONS A &amp; B:</b>	<b>2889</b>	<b>.72</b>		
<b>GRAND TOTAL OF ALL PARTICIPANTS:</b>	<b>400136</b>	<b>100</b>		
<b>Web Audiences: Unique IP Addresses:</b>	<b>0</b>			

\* Percents within a category are calculated based on the total number of participants in that category. Percents of the total participants in a category (e.g.: Total Faculty, Total Students, etc) are based on the number of the sub total

of all direct/outreach participants.

**\*\* Total Teachers** is computed using the subcategory values (K-4, 5-8, 9-12, In-Services) when the "Total Number of K-12 Teachers" has not been entered; else the entered value is used. Hence, "Total Teachers" may be less than, equal to, or greater than the sum of the four Teacher subcategories. A teacher may teach more than one grade; also, participants may not have entered all required "Teacher" values.

There were 1 reports in which the "Total Number of K-12 Teachers: Physical Presence" was not provided, although values for at least one of the four Teacher subcategories was entered.

There were 3 reports in which the "Total Number of K-12 Teachers: Physical Presence" was entered, but values for none of the four Teacher subcategories was provided.

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#### MATERIALS DISTRIBUTED AND DEMONSTRATED:

<u>Statement</u>	<u>Total</u>	<u>Average</u>	<u>No Answer</u>
Total Number of NASA educational materials (videos, publications, wall posters,-- not patches, pencils, bookmarks, etc.) distributed:	0	0	164
Number of NASA individual educational materials demonstrated by presenter/s during the program:	0	0	164

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*Report generated on: 11-Nov-2003*

**NAG 13 - 00043**  
**REPORT OF NEW TECHNOLOGY/INVENTIONS**  
**(Required by New Technology or Patent Rights Clause)**

1. Name and Address of Contractor –

Fulton-Montgomery Community College  
Attn: Mr. Michael E. Flinton  
2805 State Highway 67  
Johnstown, NY 12095

2. Contract/Grant Number NAG 13 - 00043

3. List each New Technology/Invention by Title and Innovator's Name.

4. Under the NASA FAR clauses in your contract, you have the right to retain title of the intellectual property developed under this NASA contract. The FAR clauses stipulate that you must elect whether or not you wish to retain title of the intellectual property by notifying NASA, in writing, within 2 years of disclosure of the technology. In addition, once you have elected to retain title to a technology, you must file an initial patent application within 1 year after election of title.

In accordance with FAR Section 52.227-11 (2), an election to retain title to a reported technology will be submitted to the Federal Agency in writing within 2 years of disclosure.

\_\_\_\_\_ We wish to retain title to the subject technology at this time.

\_\_\_\_\_ We do not wish to retain title to the subject technology. We understand that the rights to this technology will revert to NASA. We give permission for NASA to take rights to this technology immediately.

5. List subcontracts containing New Technology or Patent Rights Clause (if "None", so state). Provide name, address and subcontract number.

6. Certification is hereby made to the following: (check "a" or "b")

\_\_\_\_\_ a. New Technology/Inventions listed above are all of the items required to be reported.

  X   b. No New Technology/Inventions were made under the contract/grant identified above.

Michael E. Flinton  
Name & Title of Authorized Contractor Official

Original signed (separate copy)  
Signature

Date: December 1, 2003

**NAG 13 - 02053**  
**REPORT OF NEW TECHNOLOGY/INVENTIONS**  
**(Required by New Technology or Patent Rights Clause)**

1. Name and Address of Contractor –

Fulton-Montgomery Community College  
Attn: Mr. Michael E. Flinton  
2805 State Highway 67  
Johnstown, NY 12095

2. Contract/Grant Number NAG 13 - 02053

3. List each New Technology/Invention by Title and Innovator's Name.

4. Under the NASA FAR clauses in your contract, you have the right to retain title of the intellectual property developed under this NASA contract. The FAR clauses stipulate that you must elect whether or not you wish to retain title of the intellectual property by notifying NASA, in writing, within 2 years of disclosure of the technology. In addition, once you have elected to retain title to a technology, you must file an initial patent application within 1 year after election of title.

In accordance with FAR Section 52.227-11 (2), an election to retain title to a reported technology will be submitted to the Federal Agency in writing within 2 years of disclosure.

\_\_\_\_\_ We wish to retain title to the subject technology at this time.

\_\_\_\_\_ We do not wish to retain title to the subject technology. We understand that the rights to this technology will revert to NASA. We give permission for NASA to take rights to this technology immediately.

5. List subcontracts containing New Technology or Patent Rights Clause (if "None", so state). Provide name, address and subcontract number.

6. Certification is hereby made to the following: (check "a" or "b")

\_\_\_\_\_ a. New Technology/Inventions listed above are all of the items required to be reported.

  X   b. No New Technology/Inventions were made under the contract/grant identified above.

Michael E. Flinton  
Name & Title of Authorized Contractor Official

Original signed (separate copy)  
Signature

Date: December 1, 2003

Signature Michael E. Flinton  
Michael E. Flinton, Director  
Spatial Information Technology Center

Date December 15, 2003

For further information or questions pertaining to this report, please contact:

Michael E. Flinton, Director  
Spatial Information Technology Center  
Fulton-Montgomery Community College  
2805 State Highway 67  
Johnstown, NY 12095

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